



Go to ... [Help](#) | [Logoff](#)

Citation 1

Unique Identifier

95161012

Authors

Grijalba B. Berciano J. Anciones B. Pazos A. Pascual J.

Institution

Department of Physiology and Pharmacology, University Hospital Marques de Valdecilla, Faculty of Medicine, University of Cantabria, Santander, Spain.

Title

Adrenergic receptors in the cerebellum of olivopontocerebellar atrophy.

Source

Journal of Neural Transmission - General Section. 96(2):135-42, 1994.

Abstract

Using autoradiographic techniques we studied the changes that in adrenergic receptors occurred in the cerebellum of two olivopontocerebellar atrophy (OPCA) patients as compared with a control group. In OPCA cerebellum the densities of total beta-adrenoceptors were reduced along the cortex but increased in the white matter. Although mainly the beta 1 subtype was decreased along the cerebellar cortex, the increase of beta-receptors over the white matter was due to a selective raise in the beta 2 subtype. These findings suggest a postsynaptic neuronal location for the beta 1 subtype and a glial location for the beta 2-adrenoceptor. On the other hand, alpha 2-adrenoceptors were clearly reduced all along the cerebellar cortex of these OPCA brains, this probably being secondary to the loss of presynaptic adrenergic terminals arising from the locus coeruleus. These results help clarify both the subcellular location of adrenoceptors in human cerebellum and the neurochemical pathophysiology of OPCA.

